August 24, 2016

Senate Energy and Technology Committee
Lansing, Michigan

Re: Addressing potential capacity shortfalls in Michigan

Dear Senators,

The Michigan Environmental Council would like to take this opportunity to provide the legislature and the Michigan Public Service Commission (Commission) feedback regarding the recent staff report on capacity, the August 9, 2016 letter to John Longhorn at MISO, and to address the broader issues of what steps the Commission is taking today to reduce risks related to potential future capacity constraints. Michigan has for the past decade or more been in over-capacity situation regarding generating capacity. However, with recent closures, and announced future closures, we will much closer to matching capacity with current generating requirements.

We are pleased that the administration is monitoring the issue. However, what is unclear from recent communication are the goals that the administration is trying achieve moving forward, and the mechanism they are prepared to employ to reach those goals. In our mind, the primary goal should be to meet our capacity requirements at the lowest cost possible for Michigan ratepayers.

Our of our primary concerns is that Michigan's historic over-capacity position has, at least in part, contributed to Michigan having the highest electricity rates in the Midwest. Going forward we need to better complement our focus on generating capacity with meeting demand in the most cost effective manner possible including non-generation alternatives. However, to-date these areas has received little attention from the utilities or the Commission.

We find it helpful to remind decision makers that our current capacity/reliability discussion is all about 60-80 hours / year – the extent of time the last 15% of our capacity is used. Above that amount, MISO requires the state to have another 15% of reserve capacity. Given our current use patterns, that equates to 30% of our capacity being used to meet demand for 1% of the hours of the years. This fact alone should drive most of our attention to reducing peak demand to increase the value ratepayers receive from existing capacity investments.

<u>MISO letter and Staff Capacity Report</u>

The Commission and the Michigan Agency for Energy mention in the MISO letter their concern with the planned or unplanned outage of both nuclear power plants representing

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1855 MW of capacity. As of 2014, Michigan had an overall summer of 30,435 MW. Of that 22,260 operated by our public utilities, and 8,175 by independent power producers. Therefore, the two nuclear plants represent only 6% of our total generating capacity, and 8.3% of utility owned capacity. Both of those numbers appear comfortably within the 15% reserve requirement required by MISO. Taking into consideration recent retirements by Consumers Energy of 950 MW of old coal-fired generation (offset in part by the recent acquisition of 548 MW of natural gas capacity), Michigan still retains healthy reserve margins.

This letter comes at the heels of a self-assessment conducted MPSC staff of our overall capacity position in Michigan over the next 5 years. In the report staff summarized:

> "As indicated by line 9 of table 1, Staff findings in this matter indicate that LRZ 7 is not likely to fall short of its LCR for the foreseeable future. It notes that using out-of-state sources, the maximum shortfall of 270 MW represents less than 10% of our transmission import capacity." (page 4)

Addressing Capacity Management Long-term

One area we are in firm agreement with the administration is the need to address Michigan's long-term capacity position. As we retire more of our older coal-fired generating capacity we have a great opportunity to utilize non-generation related techniques for meeting future demand. However, our failure to implementing those practices today and undermining their potential to contribute to moving us out of our current status of highest electricity rates in the Midwest.

Working in our favor, is the fact the Commission currently has the authority to move forward in these areas. However, its failure to exercise that authority concerns us, and is already having upward pressure on Michigan's rates. We think the Commission and the Legislature should undertake the following efforts to reduce risks related to capacity shortfalls in Michigan:

Rates that better reflect costs of service – Utilities should be required to create rates that better reflect the true cost of providing energy and which reflect the variations in cost that occur throughout the year and throughout the day. The Commission was quick to penalize residential ratepayers for their contribution toward peak demand in the summer, but have yet to require the utilities to design rates that would send any price signal to customers to change that behavior. Ratepayers of all classes should be phased over to rates that better reflects the actual cost of energy. That single effort would reduce our overall capacity needs and therefore reduce costs for serving all customers and help reduce everyone rates.

Advanced meters – When the Commission approved the installation of advanced meters for both DTE and Consumers Energy, it was based on projections that the meters would result in over $500 million in savings in meeting future capacity requirements through demand response programs. Ratepayers are currently paying for those meter investments at a cost of over $1.1 billion.

However, the savings will not materialize automatically – it is going to require Commission or legislative action. It will require utilities following through and creating rate tariffs that change behavior and make those savings happen. In pilot studies, the utilities demonstrated that 40% of residential peak demand could be avoided through time of day rate design. Now is the time to require utilities to achieve the savings they said were possible. Otherwise, ratepayers are paying for meters but not receiving the benefits.

A requirement should be placed on utilities that they place a customer in the rate tariff that saves them the most money after collecting 12 months of actual data. The notice would include the projected savings based on a customer's use history and notice that the customers can opt-out of the change before it happens or at any time in the future. This effort would complement efforts on rate design, because in many cases we believe the lowest cost option would be a "time of use" rate designed to reduce usage during peak demand periods.

Access to data - Related to the use of advanced meters is requiring customers to have full access to their use data to maximize the opportunity to work with energy efficiency service providers to reduce overall and peak demand. Programs across the country like "Green Button" provide a trusted source to convey customer use data to either the customer of energy efficiency service providers that assist customers to reduce the use of power.

Grid Upgrades – The electric grid of Michigan in many areas is based on the technology of the 1950s. For that reason, utilities are poised to spend billions of dollars in grid upgrades over the next ten years. The good news is that a number of advancements in grid technology can help reduce the overall capacity needed to serve customers. One measure of this is known as "line losses," electricity that is generated but never reaches a customer. Michigan has above average line losses that have not improved in decades. Our average line loss rates are in the 7-8% range, above the national and regional averages. Although that average number doesn't sound like it would have a great impact, it does because the number swells during peak usage times and can double or triple during periods of high demand. As utilities proposed new spending in the area of grid upgrades, the Commission must ensure all efforts are being undertaken to improve the overall grid efficiency moving forward.

Distributed Generations and Combined Heat and Power – Distributed generation by customers has the potential to make a substantial contribution to meeting capacity requirements. In addition, combined heat and power at those facilities which utilize both forms of energy are usually the most efficient method of meeting their demand. To the extent a customer's operation is flexible, their dedication of that capacity to our peak demand periods provides them added financial benefits. However, negotiating individual contracts with utilities for each project is proving to be cost prohibitive. The Commission could alleviate this barrier through requiring standard offer contracts for CHP projects

In summary, the Commission has a number of opportunities in which they could use their current authority to address capacity shortfalls. In many of these cases, waiting will

undermine their effectiveness. We acknowledge the Commission is aware of many of these opportunities through their creation of workgroups or study committees. However, the Commission and/or the legislature needs to act and require specific implementation timelines if they want to protect Michigan ratepayers.

Sincerely,

James Clift, Policy Director

cc. Valerie Brader, Executive Director, Michigan Agency for Energy

Sally Talberg, Chairman, Michigan Public Service Commission